

10/561075

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Paula S. Linkhart  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**Tianlin WANG**

**Michael M. LOHUIS**

**Cheryl J. KOJIMA**

**Fengxing DU**

**John C. BYATT**

§

§ Group Art Unit:

§

§ Examiner:

§

§ Atty. Dkt. No.: **11916.0065.PCUS00**

§

Serial No.:

§

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Filed:

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For: **MARKER ASSISTED BEST LINEAR  
UNBIASED PREDICTION (MA-BLUP):  
SOFTWARE ADAPTIONS FOR LARGE  
BREEDING POPULATIONS IN FARM  
ANIMAL SPECIES**

§

§ §371 Application of International

§ Application PCT/US2005/002362,

§ filed January 27, 2005

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**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, Applicants respectfully request that this Information Disclosure Statement be entered and that the references listed on attached Form PTO-1449 be considered by the Examiner and made of record.

10/561075

19 DEC 2005

The present application is a §371 national application of PCT Application No. PCT/US2005/002362, filed January 27, 2005. The PCT Application is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d), a copy of the listed documents, C1-C3 are not enclosed as they have been previously cited by or submitted to the U.S. Patent and Trademark Office in the International Search Report dated August 29, 2005. References B1, C4-C10 are attached.

In accordance with 37 C.F.R. § 1.97(g), this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information, as defined in 37 C.F.R. § 1.56, exists.

The present Information Disclosure Statement is being filed prior to the receipt of a first Office Action on the merits; and hence, is believed to be timely-filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement; however, if any fees should be due, the Commissioner is hereby authorized to deduct said fees from Deposit Account No. 01-2508/11916.0065.PCUS00.

Applicant respectfully requests that the listed documents be made of record in the present case.

Respectfully submitted,



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Date: December 19, 2005

Form PTO-1449 (modified)	Atty. Docket No. 11916.0065.PCUS00	Serial No. <b>10/561075</b>
List of Patents and Publications for Applicant's  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)	Applicant Tianlan WANG; Michael M. LOHUIS; Cheryl J. KOJIMA; Fengxing DU; John C. BYATT	
	Filing Date:	Group:
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Pages 1-2</i>

**U.S. Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	2005/0065736	3/24/05	Bauck et al.	702	20	7/13/04

**Foreign Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 02/20850	3/14/02	WIPO	C12Q		

**Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C1	Theo Meuwissen, "Genomic Selection: The Future of Marker Assisted Selection and Animal Breeding", <i>Electronic Forum on Biotechnology in Food and Agriculture</i> , pp. 54-59 (2003).
	C2	T.H.E. Meuwissen et al., "Marker Assisted Selection in Animal Breeding Schemes", <i>Animal Genetics</i> , 27(2):101 (1997).
	C3	Jack C.M. Dekkers et al., "Optimal Selection on Two Quantitative Trait Loci with Linkage", <i>Genet. Sel. Evol.</i> , 34:171-192 (2002).
	C4	S. Tsuruta et al., "Use of the Preconditioned Conjugate Gradient Algorithm as a Generic Solver for Mixed-Model Equations in Animal Breeding Applications," <i>J. Animal Sci.</i> , 79:1166-1172 (2001).
	C5	Denis Milan et al., "A Mutation in PRKAG3 Associated with Excess Glycogen Content in Pig Skeletal Muscle," <i>Science</i> , 288:1248-1251 (2000).
	C6	I. Stradén et al., "Solving Large Mixed Linear Models Using Preconditioned Conjugate Gradient Iteration," <i>J. Dairy Sci.</i> , 82:2779-2787 (1999).
	C7	M. Lidauer et al., "Solving Large Test-Day Models by Iteration on Data and Preconditioned Conjugate Gradient," <i>J. Dairy Sci.</i> , 82:2788-2796 (1999).
	C8	T. Wang et al., "Genetic Evaluation by Best Linear Unbiased Prediction Using Marker and Trait Information in a Multibreed Population," <i>Genetics</i> , 148:507-515 (1998).

**EXAMINER:****DATE CONSIDERED:**

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

*INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)*

Form PTO-1449 (modified)		Atty. Docket No. 11916.0065.PCUS00	Serial No. <b>10/561075</b>
List of Patents and Publications for Applicant's  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		Applicant Tianlan WANG; Michael M. LOHUIS; Cheryl J. KOJIMA; Fengxing DU; John C. BYATT	
		Filing Date:	Group:
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Pages 1-2</i>	

### Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C9	T. Wang et al., "Covariance Between Relatives for a Marked Quantitative Trait Locus," <i>Genet. Sel. Evol.</i> , 27:251-274 (1995).
	C10	Jonathan Richard Schewchuk, "An Introduction to the Conjugate Gradient Method Without the Agonizing Pain," <i>Tech. Rep.</i> CMU-CS-94-125, Carnegie Mellon University, Pittsburgh, Pa. (1994).

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